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Child-Study.

The Journal of the Child-Study Society.

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Vol. 3.—No. 3. OCTOBER, 1910.

Child-Study.

The Journal of the Child-Study Society.

IMPERFECTIONS IN PHYSICAL GROWTH AS HINDRANCES TO SOCIAL DEVELOPMENT.

By ALFRED A. MUMFORD, M.D., B.Sc., etc.
Medical Officer Manchester Grammar School.

A paper read before the Child-Study Society, Halifax, January 19, 1910.

By imperfection of physical growth, I understand the falling short of such bodily growth and development as is considered natural for the majority of human individuals when brought up under healthy conditions in a civilized community. In view of the fact that grave imperfection of growth often prevents an individual from attaining a proper social position, we speak of it as resulting in physical disability.

Few, if any, would claim that the possibilities of growth and attainment are the same for all, for it is common experience that quite as wide a range of powers as of opportunities exists.

Without there being any uniformity, however, certain limits can be, and generally are, set to possible variations, below which we do not claim that individuals have attained sufficient growth either in size or power to become, through the working years of life, full wage-earning and self-supporting members of the community. If any given individual falls so far short of his or her proper growth, or suffers from such a natural deprivation of his powers of sight, of hearing, of bodily growth, or deficiency of power of reason and self-direction and control, as to be unable to do this, we consider he or she is suffering from severe physical imperfection. By social development I understand the obtaining of a social status as a result of efforts put forth. Such efforts are an expression of physical powers, and the degree of the powers is largely determined by influences at work before birth and during the early years of life. If the efforts which one particular individual puts forth

are in considerable excess of the efforts put forth by his neighbours, there may be a very considerable rise or social advancement which, though occasionally spurious or adventitious, is more often related to the progressive development and display of various physical, mental, or moral powers. Apart from pecuniary or social advancement, intellectual and moral growth may be the most apparent form of social development, but it is still the result of efforts put forth by means of energy which exists within the individual.

Hindrances to physical growth, and consequently to social advancement, may, and do, occur at all ages. Powers once possessed may be lost. I desire to concern myself rather with the aspects of the case that present themselves during school life. Estimating the population of Great Britain as 35 millions, there are 4 or 5 millions under school age, and about 6 millions of school age—that is, between 6 and 14. Of these about 90 per cent. are getting their education free. Since the country has assumed the responsibility of providing the funds, it naturally should also accept the responsibility of examining from time to time whether such expenditure is sufficient, and whether it is properly incurred. If any considerable proportion of the children is unable to benefit by the education provided, certain questions soon present themselves and demand an answer. Let us start with the mentally defective children—that is, the special class of children who are not sufficiently imbecile to be incapable of learning anything whatever at school, but are a source of anxiety and trouble on account of backwardness, though quite able to learn to become wage earners of a certain grade. They are, however, incapacitated by defective brain development from working at the same rate and on the same terms of independence as their fellows, and in most cases unable to attain such degree of self-control and self-direction as to become useful and self-existing citizens when free. The report of the Commission on Feeble-Minded Children shows that when these children grow up to manhood and womanhood, they drift in large numbers into the prisons, the workhouses and the county asylums. They make up the large bulk of persons committed for trivial offences. Repeated punishment has no remedial effect. They have not the capacity to learn by experience. They are idle and shiftless casuals, and are a nuisance to all who have to deal with the unemployed; for by their inadequacy and inefficiency they render futile many useful measures. The numbers in which they exist is variously estimated by different investigators, according to the standards employed and the period of life at which the investigation is made. Most school authorities which cover a wide range of urban life, find at least 1 per cent. of the children who are attending ordinary city

schools are unable to profit by the education provided, or are by moral imperfections unsuitable to be left with their fellows without special supervision. They require special treatment, special schools. There is probably at least another 1 per cent. of the school age population of still lower grade of mental or bodily deficiency unable to attend school at all. Something, therefore, between 1–3 per cent. of the children who should be attending public elementary schools are suffering from such mental deficiency due to imperfection of growth of brain that they are incapable of benefiting by the education provided. The existence of such a group or class of children in the school community, and in the larger world outside, opens up the following social questions: Is it worth while to train them? Would it not be better to let them sink uninterruptedly to their natural level and become extinct in the struggle for existence?

Before, however, finally committing ourselves to a possibly ineffective and may be cruel method of dealing with the matter, it would be well to ask ourselves why such children are present in the world at all? Are they the result of sin, drink, and debauchery, and is their affliction the penalty Nature exacts for such? If so, there might be some justification for leaving them to the stern execution provided by Fate.

A good deal of attention has lately been given to these children. When Nature scatters her gifts upon us she does not divide them with equal hands. Some recipients have more than their share, others less. Every now and then in the upper and in the middle class families, as well as among poorer class ones, certain children are born whose brains are of such imperfect formation that the child fails to develop perfectly normally. The arrow of life's vigour is shot, but it falls short of its full flight, however favourable wind and weather, which sped its journey, might have been. In some cases the cause is poor health or exhaustion of the mother anterior to child-birth; but in others there seem to be no available explanation except that it is a peculiarity of growth. In some cases an arrest of development at one stage is made up by increased growth at another, so that sufficient power is ultimately attained for the child to become a fairly normal man or woman.

Though the first appearance of such children is equally common in all classes of the community, yet the conditions of life in the middle and upper classes differ from those occurring among the labouring classes in such a way that in the first case a boy or girl whose mental deficiency is marked, fails to maintain his position, and also to secure a partner. The mental deficiency, therefore, which, in many of its forms, is capable of transmission by heredity, naturally ceases with the

individual and tends to be extinguished. With the casual labouring classes, however, so many forms of irregular employment are possible, so many opportunities of a parasitic or semiparasitic life, generally more or less associated with crime, exist, that mental deficiency in childhood and youthhood is no bar to mating. Offspring are brought into the world who inherit the mental deficiency of their parents, and so a condition of imperfect brain growth is perpetuated in the slums which tends to extinction in the middle classes. The student of national progress may detect a similar condition of affairs in regard to drunkenness. Formerly drunkenness was a national habit, prevalent among all sections and classes of the community. As life became more persistently strenuous, and social status less capable of being maintained by merely periodic outbursts of energy, more nerve control became needed for the daily affairs of life. Experience rapidly showed that drunkenness impaired social efficiency, so that it became increasingly viewed with disapproval. Those who indulged in it, especially when they showed other signs of defective control and determination, were unsuccessful in maintaining their social status and fell into strata below. They actually failed to secure partners, or perhaps it would be truer to say, often failed to secure the partners best capable of maintaining the higher level. Alcoholic excess thus became less and less prevalent among the middle classes. During the last ten to fifteen years it has also become less and less prevalent in the upper artisan classes, and to find a prevalence of drunkenness we have to go to the lowest strata of society, where there is no need for strenuous exertion. Existence in the slums is hard, but such exertions as are called for are of too short duration to be really strenuous.

The physical condition of the dwellers in the crowded parts of the large cities has been pressed on general attention as a consequence of the Public Elementary Education Act of 1870 and the subsequent additions thereto. The conscientious teacher, the hospital or dispensary doctor, and the poor law official find individuals of defective physical endowment pressing themselves on their attention in apparently increasing numbers. The task of reforming such individuals when adults is hopeless. Is there any chance of dealing with them successfully in childhood? Can they ever become really normal citizens?

From time to time one hears discussions as to which was the greatest age of the world's history. When did a particular nation achieve the zenith of its power, and subsequently begin to fade? Some urge that the Elizabethan age was the greatest in England's history and that the brilliant group of statesmen, actors, writers, sailors, and merchants that belonged to Shakespeare's time has never been equalled and will never

come again. Others travel a little further back, and dwell on the outburst of joy and energy that witnessed the rebirth of learning at the Renaissance, which opened out to a world, tired of violence and personal strife, the glories of ancient thought. Others point to the Victorian age with its conquest over the physical forces of nature and the subordination of these forces to man's requirements.

Personally I think a case might well be made out for the age that is before us, and on the shores of which we are now standing, in that it offers opportunities that have never been offered before for social reconstruction, and for an application of known biological laws concerning bodily and mental growth, which, if applied properly, may lead to such a realization of a healthy mind in a healthy body as have never been understood before.

We may be the more inclined to consider the possibilities in this direction, when we remember how frequently the doctrine of Natural Selection is being invoked as a basis for political action, though one might hesitate to assent to its application in the bald way most generally urged. If by Natural Selection we mean the play of natural forces of growth and struggle over which man has no control, then man has already prejudiced the appeal by allowing to be set up in the cities an absolutely unnatural set of circumstances, under which normal growth cannot take place. The deprivation of sunshine and of fresh air, the setting up of artificial methods of temptation, the stimulation of gross and evil habits of drunkenness and vice, the virtual withdrawal of fair and free opportunities for obtaining food, are all inimical to healthy growth. Under these conditions only a debased and a degraded race can exist and multiply.

The Natural Selection of the Forest and the Prairie has certainly something in its favour, for it stimulated growth and effort, but the Natural Selection of the Slum has nothing good about it. It arrests all healthy growth and only allows the survival of those who can exist under unhealthy conditions. Man has made the evil conditions, and they will exist till man removes them. When he removes them, or as he removes them, the conditions which favour the persistence and the prevalence of the mentally deficient, the criminal and the alcoholic, will no longer exist, and a more fitting Struggle for Existence with the survival of finer types will take its place. The trend of recent knowledge is very distinctly in the direction of showing how the present conditions are both depressing healthy growth in the individual and are favouring the survival of a type with poor energizing power.

The first note of dissatisfaction with the present condition of things as regards the growth of children and their preparation of obtaining

a social status, was sounded by the Royal Commission which was appointed in March, 1902, to inquire into the opportunities for physical training which were available in the state-aided schools and other educational institutions in Scotland. The Commission made special inquiries into existing physical conditions of a number of children in Edinburgh and Aberdeen, and in their report, published March, 1903, commented on the adverse conditions under which a large number of city children were growing up. They especially urged the need of some form of medical inspection, mainly for the purpose of remedying existing disease and defect, but they also urged that it would result in obtaining more accurate knowledge of existing conditions, and enable proper steps to be taken to improve national physique and to retard such degeneration as was in progress. The report of the Scottish Commission was not allowed to sink into oblivion. Several English Governmental Departments were instructed, September, 1903, to hold a joint inquiry into the alleged national degeneration, primarily, it is true, with a view to determining why there was such a large proportion of rejections of candidates for the army, but also with a view to finding out in what way the medical profession might best be consulted on the subject. The results of the inquiry were published, 1904, as the Report of the Interdepartmental Committee on Physical Deterioration. It discussed the reason for the large number of rejections of intending recruits, but gave most of its attention to the causes and indications of degeneracy occurring in particular classes. After discussing the increased growth of city life and the diminution of country life, the Committee turned its attention to school life, and here found causes actually at work which should be at once stopped.

Dr. Leslie Mackenzie, the Medical Inspector to the Local Government Board in Scotland, who, in 1902, had made some important investigations into the physical development of groups of children in Edinburgh, for the benefit of the Scottish Commission, has since extended his researches to Glasgow, and in 1907 published the most complete analysis of the exact relation of home conditions to growth and to mental development that has hitherto appeared. He showed that the less the room available for the family the greater the interferance with proper growth. Children brought up under bad conditions of poverty, insufficient food, imperfect clothing, fell short of their proper growth in height and weight to an alarming extent, and were attaining manhood and womanhood, quite insufficiently supplied with power and energy to obtain proper social status.

It may be argued that such children never would and never could attain the stature and growth of the most favoured section of the

community. This is but part of the truth; the evidence is overwhelming that when these children are for a time removed to better conditions, very considerable increase of growth is attained, and the real difficulty is that such removals can be only very partial and very temporary. They partake of the nature of experiment. The children when they return to their evil environment speedily relapse to the lower level of growth.

The figures given by Dr. Mackenzie show how great is the loss of height and weight due to adverse conditions of home. The more densely packed the home, the less the fresh air and stimulus for growth, and, no doubt closely allied, the less the food supply, the clothing, and the amount of rest for recovery from the fatigues of the day.

Loss of Lbs. in Weight according to Size of Tenement.

Ages		7	8	9	10	11	12	13	14
Group I., below average of whole country in lbs.	3·1	4·0	6·6	6·7	8·5	9·4	13·2	16·0	21·3
Group II.	2·3	3·7	6·0	5·0	7·5	9·0	13·0	15·0	20·0
Group III.	1·4	1·1	2·6	2·0	3·2	4·6	6·6	11·2	10·5

Loss of Inches in Height.

Ages	6	7	8	9	10	11	12	13	14
Group I.	2·2	2·0	2·5	2·8	3·3	3·5	4·3	4·2	4·7
Group II.	1·6	1·8	2·1	2·1	2·7	2·7	3·5	3·6	4·1
Group III.	0·1	0·3	0·3	0·6	0·6	0·8	2·4	1·8	2·7

Group I. comprise single-room tenement; Group II. comprise two-roomed tenement; Group III. comprise three or more roomed tenement.

Now, the children represented by these figures constitute a much larger proportion of school children than do the mentally defective. If these children were physically defective entirely by defect of *hereditary* endowment, and were incapable of being made into anything better, then indeed the condition of affairs would be disheartening. But if they are physically defective owing in part to the depressing influence of environment on their growth, but are still capable of an adequate physical growth under proper conditions, then some further social reconstruction becomes a National necessity.

Recent investigation into heredity seems at times to separate innate power of growth from outward circumstances too violently. Such a separation is only helpful to a certain extent. It may readily become

misleading. All growth is dependent upon certain outward conditions, and if these do not prevail, growth is arrested. Under given conditions we may breed continuously a certain race of vigorous men and women, but when we remove those conditions, however good the stock, the vigour of the race dwindles. Growth is the result of the stimulation of certain innate powers by outward circumstances; without the stimulus, growth takes other directions. The only growth allowed by the slum is a debased growth. Whatever vigour of life still remains will often perforce seek anti-social channels. Probably to the other agencies which impair growth of body and self-control in the slum must be added loss of sleep. The incessant stimulation of life with hardly any periods of cessation, results in a wear and tear of nerve energy, and a dissipation of vital strength, which lowers the power of resistance to disease. This, combined with the lack of the proper stimulants to growth—sunlight and oxygen—results in an impairment of growth which is threatening National stability. The shortage of food must also be a contributory factor, though it is impossible to trace its precise effect.

Four-fifths of the intake of food of a normal individual is required for heating the body, and the remaining one-fifth is divided between the energy needed for growth, and that expended in bodily activity, and in repair of tissues already undergoing active wear and tear. If we place the growing child on short rations, the supply of energy is correspondingly diminished, and perhaps the bodily growth is the element which suffers most of all.

It seems almost unnecessary at the present day to insist on the close relation between the development of the bodily and that of the mental powers. One illustration may, however, be given from the Report of the Interdepartmental Committee on Medical Inspection and Feeding of Children attending Elementary Schools published in 1905.

Dr. Ritchie examined some 470 children, who, instead of being in the standard proper to their age, were at least two years behind it. Of these, 325 exhibited marks of bad health and nutrition; 158 showed enlarged lymphatic glands (which if not already invaded by tubercle, were preparing a soil in which tubercle could readily appear, and which certainly betrayed the ravages of some infective and depressing agency); 201 had bad teeth; 130 were indifferently clothed. The loss of school attainment was thus certainly due to preventible bodily cause, for only 79 showed defective eyes, 67 ear disease, and 14 were mentally deficient. These figures show, I think, unmistakably the operation of preventible conditions.

The above-mentioned Interdepartmental Report resulted in the

Education Administration Act of 1907, and medical inspection of school children became the order of the day. It began to take effect January, 1908. We have had now two years' experience of the working of what was at first a very hastily arranged piece of legislation. Yet those who helped to pass the Act builded perhaps better than they knew. A flood of light has been shed on many dark places, and though the result has been a revealing of much that is horrible and debased, we are considerably nearer understanding the forces at work, and no longer vaguely alarmed without understanding.

Among the twelve tasks which it was supposed would have been too much for Hercules was the cleansing of the stables of Augeas, where there was the accumulated filth of 3000 oxen during thirty years. The method Hercules adopted was one which commends itself very strongly to modern scientific medical knowledge. He directed a powerful stream of clean water from the neighbouring rivers of Alpheus and Peneus, and the force of the combined streams speedily and successfully accomplished the task. Can we sufficiently direct the forces of sanitation, and the example of right living on to the Augean stable of modern city slums? We may not, and we probably shall not, greatly affect the characters and the strength of the adult members where evil habits have taken deep root. Yet much may be done to prevent the children growing up as their parents have done.

This it seems to me is the real work of Public Elementary Education. Beginning as it did with the idea of providing every child with a smattering of knowledge, State interference soon found that it had a much larger task before it. Many children were actually injured by the efforts which were intended to benefit them. The plague spots, which had been unknown or unheeded before, now became revealed. The growing sense of social responsibility, together with the increasing tension of International struggle, have been sufficient to make us realize that much more than mere instruction must be attempted.

Simultaneously with the realization of the debased condition of the children of the slums, another spectre has appeared which seems even more fundamentally to threaten our national vigour. It is realized that increased social welfare and the diversion of personal interests into self-satisfying channels, though it does much for the individual, makes little provision for posterity. There is in every country of Europe a very serious falling off in the birth rate, and this affects most strongly the intellectual and the middle classes, and is rapidly extending to the better artisan classes. The impoverished, the weak, and the dissipated alone seem to have large families. If all who are born, grew up to maturity, the slum would very rapidly outnumber

the population above it, and by leading a parasitic life upon it would make such demands on its energies and activities as would absorb the power it needs for its own sustenance and growth. We speak of the appalling death of infancy, and we do what we can to check it. Yet that appalling death rate is the means which Nature has provided to save us from the full penalty of our national folly in allowing the slums to grow up. By its means the lowly organized slum population is kept somewhat within numerical bounds. Fresh light has been shed upon these problems by the researches of Sir Francis Galton and by Professor Karl Pearson on the comparative influence of heredity and circumstance. The exact interpretation of these investigations is not altogether clear, and there is danger in hasty conclusions being drawn before all the facts of the case are fully before us.

Throughout the animal world offspring are most numerous where destruction of offspring is most rife. Fish have millions of eggs because millions will be destroyed. It is only when reproduction occurs by millions that the permanence of the race is secured. Elephants have few young, for destruction of the young is rare. Eagles, too, whose eaglets are placed in situations largely free from danger, have few eggs in the nest. Just so many adults will be required as will fill the place of those who disappear by age or destruction. The struggle for existence is maintained by there being always a somewhat larger number produced than are required to fill the place of the previous generation. If the number is greatly in excess, the struggle will be very keen. The preservation of life, and the prolongation of working days among the middle classes, combined with the entry of women into the economic struggle, have reached such a level that there are fewer vacancies to be supplied by the children as they emerge from childhood. The pressure of the struggle for existence, though not too keen for those who have only limited pecuniary responsibilities, has become increasingly heavy on those who have families to support. As a consequence of both factors, children appear in lessened numbers in the middle classes than where children sooner became wage earners. Their maintenance in childhood, and their preparation for life, makes a heavier call on the self-effacement of parents, and only those with very strongly ingrained parental instincts are likely to accept the social sacrifice that the rearing of a family entails. There is a rightful limitation of family in accordance with opportunities for proper upbringing. In a highly civilized community such limitation may be an expression of self-control, and not of selfishness. If, however, it is the result of self-indulgence and the pursuit of self-interest, it soon

secures its own extinction. Though money or possession may be retained, the family in which self-interest prevails tends to become extinct. At the present time it is difficult to separate the effect of these two causes,—self-interest and self-control is the limitation of numbers in the family, for they produce superficially similar results. The limitation of the former is often a permanent one, and the limitation in the latter is often a temporary one. There are many, perhaps the majority of the community, who exhibit self-regard in excess, and take life for the opportunities it presents for personal advancement and the pursuit of personal pleasures; the very efforts they make are helping to secure that, as far as their actions are the expression of hereditary tendencies, the qualities they manifest shall tend to disappear from the community by the extinction of their stock. There are also many others in the community, and I believe that these occur in increasing numbers, who take the obligation of parentage as one of the highest social privileges, and not at all too dearly purchased by the prospect of the surrender of social advancement. But social advancement is not always denied to them, for the very efforts hard-working parents are compelled to put forth to support those dependent upon them, often secures higher economic prizes than they might have secured had circumstances allowed them greater leisure and made less demands upon their exertions. Whether such occurs or not, I believe a great deal of the increased humanity and sympathy of the present day is due to the persistence of family stock where such virtues are common, and the natural extinction of some stocks in which the self-effacing virtues were more rare. Perhaps a good deal of commercial selfishness that we see around us is already finding a natural check in this way, and that so much of the Individualism of the past as represented an element of selfishness is doomed to diminution or extinction before such element of present-day Socialism as represents a consideration for the welfare of others. When the community finds itself face to face with a real shortage of child-life, when there are places to fill but a lack of vigorous and capable young life to fill them, steps will no doubt be taken to ease the burdens of parentage. This is already being done to some extent by the extension of bursaries to schools, and by the suggested rebates on the income tax according to the number of children under sixteen. I am inclined to think that an indirect but by no means inconsiderable effect of the old-age pensions will be the subsidizing of families where care of parents and sympathy for others is ingrained, and where there is sufficient stock of vitality to secure its older members achieving the longer term of life. There are at present no means of knowing who are the actual

recipients of these pensions; but the considerable proportion certainly go to the struggling middle class families who desire to keep their old people among them, and yet find even the readily satisfied wants of old age are an addition to the family burden. The prevalence of Child-study associations, the gatherings of parents and teachers, and the general increased earnestness in bringing up children is a testimony to the increased worth of the child in the middle classes and to the upper working classes. There have always been a few conscientious parents, but we have only to look back a generation to realize how little the future welfare of children was regarded by most of those who had undertaken the responsibilities of parentage with a very light heart.

How is it, then, if there is an increased attention to the up-bringing of children, there are so many ill-regulated and uncontrolled and undisciplined children of the middle class, as well as among the lower classes? Does not this fact of itself imply a loss of power in family life?

Rigidity of restraint upon childhood has been withdrawn; new opportunities for freedom are opening out on every hand. Freedom has degenerated into license because the real principles of training and self-government have been ingrained neither in the parent nor in the schools. These are only now beginning to be part of the duties of education. We are in an intermediate period, when artificial external restraints have been withdrawn, and internal self-restraint has not been inculcated.

There is also one other very potent reason. Imperfection in physical growth and development affects the mental and moral qualities as well as the bodily ones. Social and family instincts are the latest to appear in a civilized community, and are among the first to suffer denudation in any artificial interference with growth. Consequently both by racial inheritance and by custom, as far as they exist at all, they are at a lower level in the slums than in the homes of classes just above them.

A very powerful denuding force that is very prevalent is the universal presence of disease in the poorer dwellings of a city. Acute infectious disease claims its thousands of victims, but the less acute and still more devastating influence of the tubercle bacillus injures its tens of thousands. Many of those children who have not already died seem to be to some extent immune or protected against the rapid action of the disease of tuberculosis. They have, however, been wounded and damaged, though not killed. They are left to struggle through childhood and early adolescence with impaired frames, and in many cases to finally succumb in early manhood or womanhood.

National elementary education has made a beginning as a State effort to do something to train the future citizen, but in far too many cases the

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work is wasted because it is too soon abandoned. Between 12 and 14 years of age there are about 1,300,000 boys and girls in England and Wales who should be under strict supervision in school, but of these, 210,000 have already obtained exemption on one plea or another. One would have thought that the age of 14 years was itself far too early for all supervision to be removed, yet in one-sixth of the cases we allow even the scanty supervision of school to be withdrawn. A National system of compulsory work and discipline will probably soon be needed up to the age of 16 or 18, which may embrace many forms of apprenticeship, or devotion to particular kinds of work, or compulsory training in domestic acts for many girls, till a fuller growth has been secured. We must recognize that the "family influence" has failed to secure proper development, and without proper development we cannot have proper citizens. Some measure of State supervision or State influence must be invoked if the community is not to perish. Only let us be wise and combine law with freedom, control with self-development.

It is in this direction that the Committee appointed by the Board of Education on the use and need for Continuation Schools has reported. They recommend supervision by school authorities up to the age of 16. Things move quickly nowadays, as was evidenced in the appointment of medical inspection of schools long before the Department of Education was ready with any plan. We may find ourselves marching more quickly than certain people think desirable. The Anglo-Saxon race has achieved its predominance, not by deep wisdom and foresight, but by readiness to adapt itself to new conditions, and the will to surmount difficulties as they arose. The new difficulties and dangers are at our doors. We know some of the means by which to meet and overcome them. Have we the will and determination to do so still left in us, or shall we shirk the task and suffer gradually failure and decay?

We cannot control all circumstances. We can only control where we know. We know some of the causes which oppose natural vigour and growth, both of character and of body. We know also that enlightened conditions mean an enlightened struggle, that the fittest to survive in the absence of sunlight and fresh air are beetles and parasites. When fresh air and sunlight appear, more vigorous and more highly organized forms of life will appear, struggle, and survive.

A nation is as great as the people who comprise it are strong and vigorous and determined. If the people fail in strength of purpose, in vigour of mind and body, in enterprize and in character, through lack of opportunity in the period of their development, then, however well-established and well governed the nation may be, however well

protected by Dreadnoughts and fortresses and torpedoes, it can never for long hold its own. It will inevitably decay from within in proportion as the manhood has gone out of its people. The salvation of the nation from the national deterioration that accompanies the dissipation of energy and strength in town and city life depends upon the schools. These are fast becoming centres for the diffusion of knowledge of hygiene and well-being. In them the early onset of disease can be, and often is, detected long before its ravages have been so extensive that return to health is impossible. It is also the observation point whence one can study the degree of interference with growth and development. It is the point where responsibility for the supervision and discipline of the child can be laid. Tubercle and rickets should be readily detected here and reported to proper authorities. Poverty of home and defective feeding can be brought home to parent through its officers. Defect of growth can be detected here; deafness, where due to negligence or chronic inflammation, could often be prevented here. Here we control circumstances, and here we see Hygeia's laws first ignored and outraged. Here at least we should endeavour to see that they are listened to and obeyed. Here hereditary laws can be recognized and studied. Where they exist as tendencies, they can be modified; and where they exist in sufficient strength to constitute unavoidable fate, they can be met with such wisdom as experience directs.

Above all, we must not violently divorce the outward circumstances which constitute the "environment" from the human beings which grow. The relations between the two are so complex, so intimate, so far-reaching that a too exclusive gaze on either may gravely impair our judgment, and lead us away from, rather than towards, enlightened action.

CHILDREN AND CINEMATOGRAPHS.

By H. HOLMAN, M.A.

The extraordinary success of cinematograph entertainments, as a business affair, is not so surprising as it may at first sight appear, when one considers the very low prices charged for admission, the comfort and attraction of many of the buildings, the convenience of going in and coming out at any moment of many hours of continuous performance, the possibility (in many cases) of seeing the whole programme twice over, the giving of free afternoon tea, and the almost universal delight in seeing pictures and dramatic representations. As to whether this form of entertainment is likely to become a permanent institution, or whether it is only a passing craze, there is hardly sufficient evidence, at present, upon which to base a confident judgment. For the moment there is a feverish activity amongst caterers for public amusement to supply more and more of such shows. In large towns one may find two or three cinematograph places within a stone's throw of each other.

Only one aspect of what is considered by some to be the evil influence of these entertainments has, so far as I am aware, received serious public attention; and this concerns the question of Sunday performances. Even this does not appear to rest upon the merits or demerits of the shows, as such, but merely upon the question of their evil as Sunday trading, and as a counter-attraction to church-going. In London the cinematograph people are out-flanking this attack by, at any rate nominally, devoting some of the proceeds to benevolent institutions, under whose public patronage the performances are advertised.

Now, these aspects of the question do not concern child-study societies, except in so far as they show how little the conscience and intelligence, in many places, are alive to the often serious and vital elements of social movements, while fully alert in pursuing financial gains or raising religious objections to Sunday trading. The purpose of this article is to suggest that there are serious and vital elements, at least in as far as children are concerned, in this recent development in social life; and that child-study societies may discharge

a public duty and confer a public benefit by studying the question and publishing the results.

It is suggested that this subject should be investigated under the following heads :—

I. *What Good Educational Use can be made of the Cinematograph.*—This is submitted as the first item, because it is well to be sure what good can be obtained from anything even before considering what evils arise from it. We seek the good things of life, and only avoid the evil. A considerable amount of journalese, *i.e.* present craze-patronizing, uninformed-idea-propagating, advertisement-advertising, and newspaper-filling matter, has been written in praise of the cinematograph as a means of education. Indeed, journalists have not hesitated to declare that it is an epoch-making, revolution-causing instrument. But we know our journalists, and need not—with all respect for them—take them seriously. What we really need to know is how the educationist and the educator view the matter.

The attention-compelling force of representations of active life—dramatic incidents, stories, and plays—goes without saying. The overwhelming appeal to the child's delight in moving things, and the often-added element of colour, are irresistible attractions to the young. The novelty, variety, contrast, play elements, constructive happenings, etc., which appear in cinematograph shows are all charms wherewith to conjure youth. There is also the constant stimulation of curiosity, in the most intense and rapid forms, as to what will happen next. Above all, there is the intense power of suggestion, which is particularly active in dramatic action, and which may move children to the loftiest moral virtues or the lowest vices—especially the latter, for the animal and brute in man is most easily aroused, while the good things of civilized life are as hard to keep as they have been to secure. But while each and all of these go to the making of the best possible conditions for true education, they also go to the disastrous destruction of true education. They may set up a habit of the mere luxurious laziness of passive attention ; an excitement and exercise of the lowest elements of character ; a debauch of exciting receptivity on the part of the child ; and the creation of an indisposition for, and active resistance of, that self-effort and constructive activity which are the corner stones of the real educative process.

We must, therefore, determine what are the conditions under which we may obtain the educational advantages, and avoid the dangers of the cinematograph as a piece of educational machinery. We must answer such questions as, Are the advantages more likely to be secured in a school and under the influence of a skilled teacher ? Are the evils

likely to be most realized in a public entertainment, where little or no control or guidance is exercised? Is there not need for insisting that children's minds should be properly prepared for what they will see, so that they may get the fullest profit from it? Ought not steps to be taken for securing the active and critical exercise of the children's observing, retaining, and judging powers, and should not the results be afterwards tested?

For the imparting of information—a subordinate educational function—the cinematograph is undoubtedly of very high value. One can sometimes see pictures which set forth the incidents of, *e.g.* lumbering, colonial farm life, bird life, manufacturing processes, alpine climbing, foreign travel, historical pageants, etc., with great vividness and accuracy—though sometimes very foolish caricatures are given for the purpose of making up impossible tragedies or farces. Much good must result from such informational series of pictures, when they are strictly natural and accurate; but even in respect of such, much more educational profit will result when they are properly correlated with the previous knowledge and present studies of the children by teachers who best know how to do this, and how to get the most and best out of the actual working of the affair.

If the above be true, it is clear that whatever educational good is to be obtained from the cinematograph is most likely to be got by trained teachers and in schools; while it is least likely to be secured at public performances. Both parents and teachers, therefore, will do well to set their minds against any easy acceptance of public performances as a cheap and helpful means of education, even where the topics dealt with are suitable. But it is just this question of the topics dealt with in public entertainments that presents the most grave and serious issue, and we will now briefly consider this.

II. *The Moral Dangers of the Present Type of Subjects dealt with at Cinematograph Exhibitions.*—Any one who has attended cinematograph shows will at once recall foolish and silly pictures which had better have been omitted, and they will have been fortunate in their experiences if they cannot recall instances of series which were in every way, and in the most serious senses, highly objectionable and pernicious.

It is, to say the least of it, undesirable that children—whose unformed judgment, crude instincts, and keen imitative susceptibilities, render them easy victims to foolish and dangerous practical mimicry—should constantly see gross examples of the most absurd and dangerous horseplay jokes (?) in which babies, furniture, animals, etc., are subjected to madly outrageous treatment. The fact that most of this is, to adults

and the more intelligent boys and girls, obviously faked, does not make the thing, as a whole, any less desirable or less dangerous in its tendency. The fact, also, that men and women in the senseless pursuing crowds, which generally conclude such incidents, manage to fall in decidedly indecent ways, increases the reasonable objections to such incidents being shown to children. Such exhibitions are, in the highest sense of the word, immoral, since they directly suggest, and hold up as sources of amusement, the worst of social bad manners. Only in the crudest and most primitive way can they be said to be really funny or witty, while they are highly vulgar and often improper.

A far more serious form of evil is involved in such series of pictures as the following: a girl of about twelve years of age is left in a room to do her lessons. Mother goes out of doors, and father sits in an adjoining room, reading newspaper. Girl throws book down on the floor (making grossly exaggerated and ugly facial contortions), indulges in violent tom-boy antics, plays with a football which she throws through a glass door, and "makes hay" of some furniture. Father hears and comes to the room; girl makes clownish pretence of playing the piano; she lies emphatically and extensively when challenged by father; father is ultra-theatrically paternal in reproving her; girl takes up book again, making grimaces to the audience. Father retires to his room; maid enters with note; father takes liberties with maid (chucks her under the chin, tries to take a kiss, etc.). Daughter plays more ridiculous pranks; father goes and upbraids her, she lies again, and he spanks her (a vulgar proceeding). Father arranges a mirror so that he can spy on his daughter; she behaves insanely again; father enters, more lies, etc., and father points to mirror as evidence; girl makes absurd pretence of weeping, and resumes her book. Father goes to his room; maid enters; father takes liberties again, and maid becomes consenting party. Daughter discovers the proceedings through the mirror, enters, catches them kissing, and accuses them. They lie profusely, but she points to mirror. Mother returns home at this point; father bribes girl with money, not to tell—while mother can see everything that happens between them, but pretends not to do so—then praises daughter to mother for good behaviour. The exaggerated antics, grimaces, etc., are unspeakably silly and vulgar throughout.

A greater amount of vulgarity and immorality could hardly be compassed in the time and incidents. To shut ones eyes to the serious evil of such exhibitions upon the minds and morals of young people is in itself gravely immoral. If children's natures are as susceptible and plastic as we believe them to be, and if the environment is as powerful

as we say that it is, then the inevitable reactions to such impressions must do wholly evil work in fashioning the ideas and characters of the young.

There is still the improper and indecent series of incidents to be considered, of which the following is a specimen: a lodging-house by the seaside, with man attendant; single young woman appears, arranges to take a room, tips the attendant and walks in. Next, man and wife come and engage a room, she (obviously a man, dressed as a woman, to do rough and tumble business later) goes in, and he leaves her at the door. Attendant does usual silly begging for tip, with open hand held out behind; man refuses to give tip, there is a scuffle and the attendant is kicked down some steps; attendant goes through vulgar pantomime as to his injuries, then taps his head (sign of intelligent thought!) and proceeds to interchange the numbers on the doors of the married and single women, and then does more vulgar pantomime. Next is seen the single young woman in her bedroom; she begins to undress. Loud laughter from the audience (especially the children's shrill voices are heard), and very suggestive screams of delight from unrestrained individuals. When young woman arrives at last garments she grins and winks at the audience, and jumps into bed. Then the husband returns; pretends to be drunk, and does the usual tumbling which only a sober man could do; goes to right door, looks at number, and then goes to wrong door and enters. Next he is seen in the bedroom of the single young woman; he begins to undress (laughter and screams from audience); at critical moment young woman acts as though waking up, screams, and throws things at the man; his wife (in night-dress) appears; the two women struggle; then the wife hustles the man away, with vulgar violence.

One can understand that young men and women of a certain age and type may like this sort of thing, and, in the obscurity of a darkened hall, indulge in an enjoyment of it which even they would not otherwise think of allowing themselves; but for big boys and girls and young children, such exhibitions should surely be held, by all decent people, to be intolerable. As a matter of fact they will be found to be fairly common. Of the various degrees of such objectionable types, and of morbid sick-bed scenes, gruesome deaths, killings, horrible suicides, thieving exploits, executions, bull-fights, prize-fights, harrowing sufferings, and the like, we need only say that such are bad enough when shown to adults; whilst needlessly to darken and corrupt, what should be the sunny brightness of innocent youth, with them, is to commit a crime against humanity.

In *The Pedagogical Seminary* for June, 1910, there is this account of

the results of a committee of investigation: "The committee examined 290 different films, and saw fit to condemn 40 per cent. of them as objectionable. The objectionable features, in the order of prevalence, were as follows:—

Stealing, 13·4 per cent.
Murder, 13·1 per cent.
Drunkenness, 13·1 per cent.
Indecent suggestions, 8·2 per cent.
House-breaking, 7·2 per cent.
Loose ideals of marriage, 6·5 per cent.
Domestic infidelity, 5·8 per cent.
Vicious mischief, 5·8 per cent.
Suicide, 3 films.
Kidnapping, 2 films.

Here is a motley array of subject-matter calculated to appeal to the baser elements in human nature!" No illustrative incidents are given to show exactly what is included under the various terms; but most of them are self-explanatory, and the meaning of the others not difficult to guess.

When we remember that impressions inevitably tend to expressions, unless definitely inhibited; that what we like we are likely to do; that keen and concentrated attention sets up strong tendencies; that vivid thoughts lead to forcible actions; and that example invites imitation—in short, that action determines reaction, and that they are part and parcel of the total circuit of an experience—we must realize how vital are the issues with which we are dealing. To give an extreme instance, by way of example. In the London daily newspapers for September 14, 1910, is told the story of a warehouseman who committed suicide by throwing himself under a train, in the same way and at the same station as his employer had done two years before; also of a young cabinet-maker who killed himself by taking the same kind of poison, while standing at the same spot, as his brother had done two months previously. This is what is known as auto-suggestion, and is by no means uncommon. This kind of influence is ever at work in human beings, and unless there is sufficient will-power—based upon, and directed by, a dominating set of ideas—to inhibit this passing from example to imitation, a form of action and re-action, it is liable to take place in the most disastrous ways.

III. *Actual Results arising from the Influence of Cinematograph Shows.*—In dealing with this point I am again indebted to the article in *The Pedagogical Seminary* by Dr. J. E. Wallace Wallin, of the Normal Training School, Cleveland, Ohio. He asked sixty-three women, ranging from 17 to 21 years of age, in an elementary class in psychology in a teachers' training school, to write answers to the question, "Have you ever seen, heard, or read about children and adults *acting out* the ideas or suggestions conveyed to them by moving pictures?" He says that "twenty-nine of the replies were negative, eight doubtful, while all the

others reported instances where they had personally observed or learned through report that the suggestion had resulted in the performance of the acts which were pictured. Seven of these related to the playing of jokes and pranks, five led to acts of stealing, four to a desire to do as the picture actors did, and two to fighting."

A few examples of the actual replies are: "Pictures with a good moral leave me with a desire for a time to act in accordance with the moral. I saw a picture depicting self-sacrifice, and for a time I did the unpleasant duties more willingly. Rather than allow my little sister to fail in arithmetic the next day I sacrificed my interest to hers, and accordingly I 'flunked' [failed] in general method the next day. This came near spoiling the good effects of the picture show." "Once I saw a picture called 'circumstantial evidence,' in which a boy, to make his mother angry, smeared jam on a cat's paws, and put hairs from a blonde lady on his father's coat. When I came home I immediately did the same thing to my father's coat, with the result that the same unfortunate thing happened to me as to the boy in the picture." "Two little girls had seen in a picture how a woman taught a little girl to steal. Later they went into a store and stole articles, and were caught. They confessed that they had received their cues in a picture show." "A girl saw in a picture show how a girl ran away from home. This induced her to run away also. When found she explained that the idea had occurred to her from seeing a picture in which a girl ran away, and in which everything turned out all right." "A boy about ten years of age saw a picture of a boy of his own age fighting his big brother. Now he is always looking for a fight with his older brother. He tries to trip him as he saw the boy tripped in the picture."

While there are many more such extracts in Dr. Wallin's article the above are sufficient for our purpose; and they at least show that we cannot afford to ignore such issues. Too many parents and teachers still seem to expect that while Bible stories and moral stories will train in virtue, that stories of fighting, robbery, malice, lying, etc., will either "do the children no harm," or teach the opposite virtue—as though the action of black would get the reaction of white. The above facts ought certainly to convince us that as we sow so we shall reap; and that there is more than enough to do in early years in building up such a sound and strong body of moral and true (scientific, etc.) ideas as will resist and repel immoral and untrue ones.

IV. *Some Physical Evils of Cinematograph Exhibitions.*—Dr. Wallin asked the same sixty-three young women students "to state in writing the effects which they had noticed moving pictures have upon their

feelings, dispositions, and health." They were particularly urged to avoid anything in the way of exaggeration, and to remain strictly true to fact. "More than half of the girls (or thirty-seven) stated that watching the moving pictures induced headache. The eyes were mentioned fifty times, fatigue or strain of the eyes being mentioned eighteen times, pain in the eyes seventeen times, and blurring fifteen times. A 'tired or drowsy feeling' was induced in twelve cases, dizziness in nine, nervousness in nine, 'feeling cross' in four, a feeling of disgust in three, and the following were mentioned once each: an impairment of the memory afterwards, a 'queer mood,' a feeling as of 'walking on air,' and a 'dreamy, adventurous frame of mind.' Exciting or unpleasant scenes were the usual causes of the nervous strain. Eight ascribed their headaches to the overheated or exhausted air, nine to the motion of the pictures, eight to eye strain, and one to the brightness of the pictures. Five suffered headache only when sitting near the screen, one only when the movement was rapid, and three when the pictures were shown continuously. . . .

"Curiously only four of the answers were negative; so that practically in every case attendance upon ordinary moving picture theatre produced some unpleasant bodily effect. Eight [of these students] had attended [cinematograph shows] about once a week during the summer, five were attending about once a week at the time, seven once or twice a month, while fifteen had attended less than six times during their lifetime. Many did not care to attend them because of the headaches or eye-strain, or because of the trivial, disgusting, silly, unnatural or exaggerated character of the subject-matter, which was 'neither funny nor interesting, but silly stuff.'"

Though most of the new buildings for cinematograph exhibitions are in many ways exceedingly well built and comfortably appointed, even with them the question of constant and complete ventilation is a very serious one. Some of these buildings are opened from 2 p.m. till 11 p.m. every day of the week, and are crowded during the greater part of the time. In old and adapted buildings the conditions are often as bad as they can possibly be, and the harm done, by the bad atmosphere in them, must be great and often grave. The frequent and general yawns, and one's own feeling of drowsiness are sufficient evidence of what is happening. The amount of dust and dirt brought into the building by the constant change of audience, demands a thoroughness and frequency of cleansing which, in the best cases, is little likely to be realized.

Such—sections I. to IV.—are the more important points which are raised by the present nature and conditions of cinematograph shows.

The evils which undoubtedly exist can undoubtedly be largely, if not wholly, removed. There is no reason whatever why the pictures should not be thoroughly religious and moral—we do not mean goody-goody or preachy, but decent and wholesome—educational, instructive, pathetic (not morbid, harrowing and gruesome), entertaining, laughable, farcical (but not grossly and crudely unnatural, unmannerly and silly), and sentimental (not vulgar and familiar). All that is needed to bring about reforms is that official responsibilities should be wisely discharged, and that public opinion should be enlightened and stimulated; and child-study societies can, if they will, do much to this end. Each of the three types of members of child-study societies can do their share of the work. Parents can supply information as to what they know of the character of the pictures at places where their children attend; and of the effects upon their children of visits to such places. Teachers can obtain from the children themselves, through composition exercises, much important information, under such headings as: Do you like cinematograph shows, and why? How often do you go to them? What sort of pictures do you like best, and why? What sort do you dislike most, and why? What was the funniest, saddest, most ridiculous, most horrible set of pictures you have seen, and why? What pictures taught you the best lessons, and which the worst? Have you, or do you know of any one who has, done things because of pictures they have seen, and what? Have your eyes, or head, ached, or have you felt in any way unwell after being in a cinematograph show? What do you think could be done to make such shows more enjoyable? Are there any things which happen at these shows which you think ought to be stopped?

Both parents and teachers might put themselves to some little trouble in going to those shows which the children are likely to attend; and finding out the character of the pictures shown, and the nature of the general conditions which prevail. In questioning children great care should be taken to prevent the children from knowing or guessing the purpose of the inquiries; and in the case of school compositions it is most important that no general talk or discussion should precede the writing of answers. Children are so easily influenced by suggestions, however indirect, that the teacher's views will often be reflected rather than the children's own opinions given, *e.g.* they might describe as objectionable what they really enjoyed and approved, or as good and desirable what they disliked and resented. If children's tastes are wrong it is highly important that we should know it, and to get such knowledge would be one of the most valuable results of an inquiry. Teachers should, therefore, simply put the questions and leave the

children perfectly free and unbiassed as to their answers. The time for talk, explanations, instruction, etc., is after, not before, the children have truly revealed themselves on this matter.

Doctors can tell us what, if any, physical evils from attending cinematograph exhibitions have come under their notice. Also they may be able to say what should be the minimum distance between the screen and the nearest observer; what should be the maximum rate at which the movements in the pictures should be taken; and what the maximum intensity of illumination—if such things be determinable and subject to regulation.

There are, of course, other points which may occur to my readers. If any think the subject of such serious importance and urgency as to demand immediate action, I would venture to urge them to proceed forthwith, on some such lines as indicated above. I shall be glad to receive communications—addressed to 8, Hornsey Lane, London, N.—from parents and doctors, and will undertake to analyze and tabulate their contents, and draw up a report upon these. In the case of teachers I would like to have, in the first instance, specimens only of written compositions, *i.e.* three of the fullest and best, three of the average, and three of the weakest answers. From these I would endeavour, with the advice and help of the teachers, to draw up a tabular form, which the teachers themselves could use, and so obtain a uniform analysis of various sets of answers. Upon these the teachers could report, and I might—if they so desired—draw up a general report therefrom.

The value of such work would be that thereby, and therefrom, we should get facts, figures, opinions, and suggestions which could be put into a pamphlet, or an appeal, and used as a means of bringing about such reforms as are required. The appeal could be made to the public through the press, to the manufacturers of films, to cinematograph proprietors and managers, to Local Government bodies and education committees, and (if need be) to the Houses of Parliament.

I submit that this is a piece of work worthy of the best energies of our child-study societies, and in regard to which we may urge: "What thou doest do quickly."

THE PSYCHOLOGY OF READING.

By T. G. TIBBEY, B.A.

In April, 1907, a suggestive "Contribution to the Pedagogy of Reading and Writing" appeared in the *Archives de Psychologie*, and was briefly reviewed in the *Paidologist* (vol. ix. p. 119). In the issue of the *Archives* for March, 1910, the same authors, M. le Dr. O. Decroly and Mlle. J. Degand, provide yet a further "Contribution à la Psychologie de la Lecture."

On analysis, reading can be shown to call for the intervention of several distinct powers, of which the visual and the motor are the most evident, and in teaching reading the question always arises as to whether it is advisable to cultivate these separately or together. The writers call attention to an earlier article on the psychology of reading in the *Revue Scientifique* for March, 1906, in which this point has been considered, restating their opinion that it is useless, and may even be dangerous, to attempt to teach together the auditive analysis of the word and its representation in writing. Since then, however, they have made further observation on the reading process in other children mentally defective in various ways.

A little lad of eight had been taught, with some difficulty, in the method indicated in the earlier article, to read mentally and carry out certain written commands, such as to raise the arms, open the window, close the doors, etc., but had not been called upon to read the words aloud. His actions showed that in some way he connected the appearance of a certain assemblage of words with some definite action which he had seen performed. Then some pictures showing a boy running, leaping, raising his arms, opening a window, etc., having been fixed on some cards, labels were made with corresponding sentences written upon them, "The boy runs, leaps," etc., and from these the little lad had to select the right one and place it beneath the appropriate picture. This was successfully accomplished, and at the same time he was able to say what the pictures meant. But when these latter were absent, it was impossible for him to express verbally what he had read mentally on the labels. The same result appeared when it was a question of names of things; he had been taught to recognize the written names of certain objects, could put the name upon the thing, and the

object upon its right name, but in the absence of the object he could not read the name on the label. This child had the visual-verbal centre intact, but the centre for verbal expression of graphic signs, and more probably the paths of association between these, were imperfect.

Another lad of fourteen years could, as above, place the right names upon objects, or could draw the thing when the name was shown; but though he could speak in a somewhat elementary manner, and could repeat words, he could not read the names the meanings of which he knew. Thus the word "*dé*" being put before him, he would show the top of his middle finger, and would try to find the word, but without success. For the word "*ciseaux*" he would make the sign of cutting, and sometimes, having repeated the sign a number of times, the word would come to him; this was true of this word only. Some others he would describe by association: thus, for the word "*lait*" he would say "*à boire,*" for the word "*poule,*" "*au jardin,*" at the same time pointing to the fowlhouse. Thus, whilst he could retain visual images, he could not fix motor-verbal images.

A third lad, of thirteen, could understand and carry out commands written upon a blackboard, and could, as before, put the right titles to pictures or to objects, but could not read orally. On some days, with a text before him, he would remain silent; on other days he would read the longer words, omitting pronouns, articles, etc. Further, when called upon to read separate words, he would give instead sometimes a synonym, sometimes a periphrasis, and at others an associated word. He could say the names of various common objects drawn in his exercise book; he could place, as before, the correct label beneath them, and could then say this written word, but he was apt to fail when asked to read the word apart from the concrete image, often expressing its meaning by a phrase indicating its use. His writing was good, and he could transcribe exactly, but could not express his own thoughts in writing; whilst writing from dictation was very defective, even though he had seen the words before. A common fault was the omission of certain letters, especially A.

The fourth subject was a little deaf lad who had been taught to read by the method of complete ideas and concrete words detailed in the earlier article. At eight and a half years he had a fairly good oral and graphic vocabulary, but showed at times a lack of association between the features and names of well-known objects. Thus, a picture of a hen being shown, the child named its different parts correctly; but being called upon to read the phrase, "The hen has some feathers, two wings, two feet," etc., he hesitated at the first word "two," and after a pause said, "to fly with." The written visual image had awakened an

exact idea of the use of the thing, but this was not associated with the motor image of language. Similarly, on other occasions, "*vilain*" was expressed as "*très pas beau*," and "*barbe*" as "*Comme, M. D.*"—the child at the same time imitating the action of a man pulling at his beard.

The authors further observed that even normal children do not escape similar lapses. A little girl of five years, seeing a number of other children learning to read, wished to do so too. Being interested in animals, from her visits to a natural history museum, she carried in a small bag a number of cards, each bearing the name of a different animal, and these, among other words, she read easily. The word "*niche*" being presented to her, she knew that it meant something for a dog, and offered to draw the thing, but could not say the name. Another time she came across the word "*phoque*" and said she knew it but could not say it. She said she had seen the animal at the museum, that it lived in water, in a cold land, and had curious feet, but could not tell what the word was. She was in the position of one who has a clear visual image of a thing, but cannot recall its name, only that she had the word before her. Somewhat similar experiences were had with a younger sister of this same girl, who at three years of age could read some thirty words, the names of known objects.

The last case cited is that of a youth of eighteen who, though in many respects intelligent, was unable to read a sentence correctly. He would change some terms, omit others, add others, and yet, if it were prose, often in such a way as not to materially change the sense of the piece. Moreover, after the reading he could yet reproduce with intelligence what he had read. Sometimes he would put a plural for a singular noun, or *vice versâ*, always, however, making the verb agree with its subject. The reading of verse was very difficult for him; often what he said was quite different in meaning to what was printed, and yet again he would sometimes carry away a correct idea of the meaning.

Neither could this youth copy correctly; he took 37 minutes, 30 minutes, and 35 minutes respectively to copy twelve lines of print, omitting many letters in the process. His own written composition was deplorable; he omitted important words, syllables and letters, and changed the order of syllables. Though he was able to abstract and generalize fairly well, and could retain ideas in their proper order, he was defective in all that required the intervention of the muscles.

Those who have taught young children to read will recognize in the above records some of the difficulties that occasionally arise under normal conditions. It is interesting, therefore, to have these lapses traced back somewhat more nearly to their origin, and to realize that many of the mistakes made by children are not due to original sin, nor

unwillingness to learn, nor are they to be always embraced under that all-inclusive formula, "lack of attention," but may be due in part to some slowness in functioning of some one factor in the learning process. Furthermore, one realizes again the truth upon which Professor Huey insists in his "Psychology of Reading," that this essentially artificial acquirement upon which so much of our mental life depends, is very complex, depending for successful operation upon many factors. When we consider how delicately these have to be adjusted to one another, we need not wonder that "learning to read" is a slow and difficult process, but rather that under some methods the child has ever learnt to read at all. He has occasionally perhaps succeeded in spite of the teaching rather than because of it.

SUGGESTIONS FOR PARENTS AND TEACHERS.

Care of the Eyes.—"The improper use of the eyes in the growing years of a child, either by reason of bad or excessive light, the use of improper materials, prolonged close work, or of any work at all during periods of poor health, will account for the onset of asthenopia, squint, myopia, and even of mental fatigue of serious order. . . . For infants and myopes I should like to see them [books] abolished."—*Dr. N. Bishop Harman*, on "The Eyes and Vision of School Children," in *School Hygiene*, August, 1910—an unusually important and valuable paper which all teachers (especially) and parents should seriously study.

Rest and Work.—"The teacher should know the most favourable periods for work and rest in a given field. Our study showed that practice when the learners were nervous or tired was not only worthless so far as strengthening old associations was concerned, but was positively injurious, because it made conditions favourable for forming wrong habits of mind and hand. The best results for learning can only be obtained when the periods of practice or study are, on the one hand, of such lengths as will give the greatest amount of practice to the habits to be formed with the best opportunity for developing interferences, and when the intervals between the practice of study periods are, on the other hand, of such length as will insure the most complete dropping out of the interfering tendencies naturally formed in the course of learning, with the least possible fading on the part of the associations to be established. Further investigation must determine what the most economic periods of work and rest in the different fields of learning are. It will be the privilege of the teacher, when this shall have been done, to make the right adjustment here as well as so to guide and direct his students that a minimum of

interferences will be formed."—*Professor W. F. Book*, on "The Rôle of the Teacher in Economic Learning," in *The Journal of Educational Psychology* (American), April, 1910.

Muscles and Morals.—"No conduct goes on without nutrition, muscle, and nerve, and it stands to reason that the better developed and co-ordinated these physical processes, *other things being equal*, the more capable a man is of the highest moral conduct; for not only can he the more easily carry on the labour by which he obtains his daily bread, but he has abundant resources left for carrying out work for others, and for being a buoyant social creature. . . .

"The exponents of physical improvement thus have a very powerful argument for the worth of their particular cause from a moral standpoint without the necessity of exaggeration by way of example. Physical development does not give a man a higher moral nature, but it allows him to exercise that nature if he has it. . . . Anything which interferes with bodily growth and with that normal balancing of bodily energies which we call health, must be productive, if not of immorality, at least of diminished capability for the highest moral attainment; and, viewed from this standpoint, the matter of the conduct of the public school with regard to these fundamental ends is of the utmost seriousness. . . .

"Moral education is said to be the end of all education; if so, from every point of view, physical education, preventive as well as helpful, looms up with growing importance."—*Dr. J. F. Rogers*, on "Physical and Moral Training," *The Pedagogical Seminary*, September, 1909.

Imagination and Play.—"There has been a curious, almost unaccountable, tendency in the kindergarten to assume that because the value of the activity lies in what it stands for to the child, therefore the materials used must be as artificial as possible, and that one must keep carefully away from real things and real acts on the part of the child. Thus one hears of gardening activities which are carried on by sprinkling grains of sand for seeds: the child sweeps and dusts a make-believe room with make-believe brooms and cloths; he sets a table, using only paper cut in the flat (and even then cut with reference to geometric designs rather than dishes), instead of toy tea-things with which the child outside the kindergarten plays. Dolls, toy locomotives, and trains of cars, etc., are tabooed as altogether too grossly real—and hence not cultivating the child's imagination.

"All this is surely mere superstition. The imaginative play of the child's mind comes through the cluster of suggestions, reminiscences, and anticipations that gather about the things he uses. The more

natural and straightforward these are, the more definite basis there is for calling up and holding together all the allied suggestions which make his imaginative play really representative. The simple cooking, dish-washing, dusting, etc., which the children do are no more prosaic or utilitarian to them than would be, say, the game of the Five Knights. To the children these occupations are surcharged with a sense of the mysterious values that attach to whatever their elders are concerned with. The materials, then, must be as "real," as direct and straightforward, as opportunity permits."—*Professor Dewey*, in his Essay on "The Kindergarten," see *The School and the Child* (see review columns).

NOTES.

MSS. for the Journal.—Several members have been good enough to send in MSS. for consideration. The editor much regrets that some were not found to be suitable: they either dealt with matters already treated of in previous papers, or were not on specifically child-study topics. Will members please note that the Journal Committee wish to keep the contents of our journal as strictly and scientifically child-study as possible—allowing, of course, all proper and reasonable exceptions. It is hoped that no one who forwards MS. which is found unsuitable will feel injured or discouraged. "Be not weary in well doing!"

No extracts for inclusion under "Suggestions for Parents and Teachers" have been received; nor any contributions from secretaries or others for these "Notes." Who will break the ice in these matters?

The Child-Study Society as a Social Influence.—Miss Alice Ravenhill is strongly of opinion that the Child-Study Society should make itself felt in matters of importance to the public. She suggests that much good could be done by an investigation into, and report upon, the working and effects of Children's Courts. The results might be used in some such ways as are suggested in "Children and Cinematographs," in this number.

Journal Circulation.—The editor would be glad to receive suggestions as to methods for increasing the circulation of *Child-Study*. He would like to know the views of secretaries, etc., as to the possibility of (*a*) selling copies at meetings, and (*b*) getting copies sold at shops—if the Journal Committee can be persuaded to send a certain number of copies "on sale or return" conditions.

Lecture Lists of the Constituent Societies.—BIRMINGHAM: Not yet finally fixed, but Drs. Helen Wodehouse, Walter Jordan, and R. Langdon-Down will give lectures during the session. CHELTENHAM: "*School from the Inside*," R. Gibson, Esq. (Headmaster King Edward's School), in October; "*Heredity and Environment*," Dr. Hebblethwaite, in November; "*The Heir of all the Ages*," Miss Nixon, in December. DUNDEE: The Committee hope to be able to arrange at least four lectures. It is hoped also that the Society may be able to co-operate with the Edinburgh Society in some piece of practical investigation. EDINBURGH: Not yet finally fixed. HALIFAX: "*Imitation and Imagination*," Professor Lloyd Morgan, Wednesday, September 28, at 7.30 p.m.; "*Some Characteristics of Adolescence*," Miss Alice Ravenhill, Thursday, October 6, at 7.30 p.m.; "*The Educational Doctrine of Pestalozzi*," Professor Welton, Thursday, October 27, at 7 p.m.; "*Coming Problems of Adolescent Training*," Dr. F. Hayward, Saturday, November 26, at

3 p.m.; "*Historic Origins of Children's Games*," Miss Margaret Cleghorn, Thursday, December 8, at 7.30 p.m.; "*Fairy Tales for Children*," E. J. Wareham, Esq., Thursday, January 19, at 7.30 p.m.; "*The Physique of the Nation's Children*," Dr. T. N. Kelynack, Thursday, February 2, at 7.30 p.m. LONDON: "*Some First Results of an Investigation into the Play Interests of English School Children*," Miss Alice Ravenhill, Thursday, October 13, at 7.30 p.m., Chairman: Sir J. Crichton Browne; "*Games and Toys for Children under Eight*," Miss Clara E. Grant, Thursday, October 27, at 7.30 p.m., Chairman: Dr. C. W. Kimmins; "*Story of some Children's Games*," Mrs. Lawrence Gomme, Thursday, November 3, at 7.30 p.m., Chairman: Professor Adams; "*Origin of Games and Toys*," Professor A. C. Haddon, Thursday, November 17, at 7.30 p.m., Chairman: H. Holman, Esq., M.A.; "*Philosophy of Boys' Games*," Felix Clay, Esq., F.R.I.B.A., Thursday, November 24, at 7.30 p.m., Chairman: Dr. James Kerr; "*The Child's Inheritance*," Dr. C. W. Saleeby, Thursday, December 1, at 7.30 p.m., Chairman: Sir Edward Brabrook. LIVERPOOL: Not yet definitely arranged. MANCHESTER: "*Childhood Suffrage, or the Rights of Boys and Girls*," John Russell, Esq., M.A. (Headmaster King Alfred Society School), Friday, October 14; "*The Infants' Department from the School Medical Officer's Point of View*," Dr. Ritchie (Medical Officer for Schools under Manchester Education Committee), Friday, November 18; "*Experimental Tests of Memory*," J. H. Pear, Esq. (Lecturer in Experimental Psychology, Manchester University), Saturday, December 10; "*The Teaching of Reading*," Miss Wroe (Principal Manchester Kindergarten Training College), January 21; "*Handwork connected with the History of Primitive Man*," Miss Findlay, February 26; A social meeting in March. EXETER: This society hopes to arrange, before Christmas, the usual reading circles and these lectures:—"*Children in Literature*," Miss Amy Short, B.A.; "*Moral Training in Schools*," F. J. Gould, Esq.; "*The Law as affecting the Health and Education of Children of School Age*," H. Lloyd Parry, Esq.. B.A., B.Sc., LL.B.

International Congress on Pédologie.—As a result of the international voting it has been decided that the first *Congrès internation aux de Pédologie* shall be held in 1911, during the month of August or September, in Belgium; be "international" in the ordinary sense of the word; last for four days; and have a subscription of 20 francs. The syllabus includes "Hygiene, Anthropométrie, Physiologie, Psychologie (Normale et Anormale), Pédagogie (Normale et Anormale), Sociologie Infantiles, Pédotechnie, Psychologie Animale."

The British Association.—At the meeting held in Sheffield last month, methods for testing and standardizing the intelligence of children were the subjects of several papers and discussions.

Enlarging our Borders.—A teacher member of one of our societies has conceived the happy idea of writing to the secretary for twelve cards of lectures, so that she might send a copy to each of the managers of her school, and thus bring the work of *Child-Study* to their notice. *Verb. sap.*

REVIEWS.

Mental Fatigue and its Measurement by the Æsthesiometer. By A. R. ABELSON. Pp. 147. Leipzig: Wilhelm Engelmann.

In this essay Dr. Abelson adduces experimental evidence to prove that the sensitiveness of the skin to touch declines with the oncoming of mental fatigue; and seeks in this decline a means of estimating the degree of mental fatigue present.

After defining "fatigue" as distinguished from boredom, the author briefly

describes various methods of estimating its degree, omitting, by the way, Dr. MacDougall's (*Brit. Journ. Psychology*, vol. i. part 4, Oct., 1905), and then gives a full bibliographical sketch of the subject.

Then follows a chapter on the fallacies of various methods of æsthesiometry and the precautions necessary to obtain reliable data.

Dr. Abelson finds special training requisite for this kind of research, as did Trotter, Davies, and others for their studies on skin innervation (*Journal of Physiology*, vol. xxxviii., Nos. 2 and 3, Feb. 1909, p. 136), and he describes and illustrates his own methods and apparatus.

The remaining half of the book is devoted to a detailed exposition of the multitudinous experiments made by the author and teachers trained by himself on adults and children to elucidate the relation between work, sensitiveness, and fatigue, under various conditions.

A valuable summary of general conclusions respecting the distribution of school work and other matters of especial interest to teachers completes the volumes.

The weakness of æsthesiometry as a guide to mental fatigue lies in the elaborate technicality of the testing process, and in the truth that the power of discriminating touches is influenced by boredom and many other factors besides mental fatigue.

Enormous numbers of observations must, consequently, be made to obtain *average* results of value, and these appeal more to drill sergeants than teachers.

Nevertheless, this study of fatigue may be heartily commended to all concerned with the economics of national education, to philanthropists and states(wo)men, to parents and teachers, and last, but not least, to the mere ratepayer.

A. B. K.

Medical Examination of Schools and Scholars. By many authors. 8vo. Pp. xvi. + 434. London : P. S. King & Co. 10*s.* 6*d.* net.

Now that medical inspection has become firmly established in most countries, it is most useful to be able to take stock of the aims and methods of procedure of those entrusted with the task.

Such a summary is afforded by the present work, of which the first part gives an account of inspection as carried out in the United Kingdom, while the remainder explains the extent and procedure in our Colonies, the United States, Germany, France, Scandinavia, and Switzerland.

Each chapter is a separate essay by some well-known authority, so that although considerable overlapping results it is more than compensated for by the insight given into the views and methods of the contributors. The bibliography attached to each article is of special value. The aim of the work is stated in the preface to be to provide a complete guide for school medical officers, and to afford educationalists and all interested in the welfare of the school child with a reliable and authoritative exposition of the methods and means whereby the best use may be made of the machinery at present available. The first aim is amply fulfilled, and the school medical officer with some little experience of conditions actually existing in schools will find it difficult to lay the task aside unfinished. The educationalist may find some of the sections somewhat technical, but it is well that he should realize some of the difficulties arising in special cases, and note that while the examination of the average healthy child can be rapidly conducted, the investigation of those physically or mentally defective often requires a considerable expenditure of time if an accurate working diagnosis is to be arrived at.

Throughout attention is drawn to the real aim of medical inspection being the amelioration of the conditions of the individual child rather than a national stock-

taking, and that this aim cannot be effectively carried out unless inspection becomes correlated in some way with treatment and the inculcation of a national conscience in hygienic matters. Dr. Leslie Mackenzie lays especial emphasis on this, pointing out that "Quantities are the temptation of every medical officer. It is so easy to be satisfied with an average and to forget that the end—the only end worth thinking about—is to make the individual child fitter for the strains of living. As in public health, so in medical inspection, there are some signs that the living child is beginning to be lost in the maze of dead figures." Yet educationalists should note that in each article indications are given of how it is hoped to make matters more individual, and that it will be time enough to collect more data when the immediate and obvious defects have been remedied, and the first principles of hygiene introduced into each home and every school. The need for consideration of secondary as well as elementary schools is adequately recognized; though some set conspicuous example of good work, others are sadly lacking, an experience which seems to be common to all countries.

The perusal of this work is essential to all who desire a knowledge of the present position of medical inspection throughout the civilized world, and to realize adequately the desires of some of its leading professional advocates.

F. C. S.

Paedologisch Jaarboek, onder redactie van Professor Dr. Phil. M. C. SCHUYTEN. 1908.

Experimental pedagogy in Belgium is represented by Dr. Schuyten, of Antwerp, whose *Paedologisch Jaarboek* has now (1910) reached its ninth year. In the 1908 volume before us a series of researches, some of considerable importance, are recounted in the Flemish language, a convenient *résumé* in French accompanying each.

The titles sufficiently indicate the nature of the investigations: (1) Sur la consommation du pain chez les enfants et la courbe annuelle de l'energie vitale; (2) Recherches esthésiométriques faites sur des élèves adultes qui suivent un cours du soir; (3) La gaucherie des membres supérieurs en rapport avec le développement intellectuel des enfants; (4) Contribution à nos connaissances de la droiterie et de la gaucherie des membres inférieurs; (5) Recherches sur la classification intellectuelle des écoliers normaux; (6) Recherches sur la variabilité psychique ininterrompue de l'enfant.

Among Dr. Schuyten's results (some of which will have a familiar sound to students of experimental pedagogy) may be mentioned the following, numbered according to above list of researches:—

How far does the workman's fatigue affect his power of evening study? It was found that an evening lesson actually seemed to increase the cutaneous sensibility of most students. Our school hours are wrong; the best hours for work are 8.30 to 10.30 in the morning, and 6 to 9 in the evening. The middle of the day, with its sunshine, etc., should not be passed in school (2).

From animals, through children to adults, leg-asymmetry regularly increases, the left leg being increasingly longer than the right. Differences of intelligence also show themselves by dynamometric tests of the two hands (3) (4).

The æsthesiometer is to some extent a more satisfactory test of intelligence than the empirical methods of the teacher. Unintelligent children are found to be insensitive. They also fatigue more early. Memory is the next best test of intelligence (5).

Muscular and psychical energy are constantly changing in amount, apart from considerations of fatigue. Intelligent children are more asymmetrical than unintelligent. Intelligent and older children have better memories than unintelligent or younger ones (6).

F. H. H.

Sir Joshua Reynolds: The Discourses. A selection edited by Professor J. J. FINDLAY. Pp. xiii. + 216. Blackie. 2*s.* net.

The School and the Child. JOHN DEWEY. Pp. 127. Selections, edited by J. J. FINDLAY. Blackie. 1*s.* net.

These two volumes of Messrs. Blackie & Son's "Library of Pedagogics" are highly creditable to the publishers as to their production. Of Sir Joshua Reynolds' *Discourses* nothing need be said as to their literary merit, but as to their place and purpose in a library of pedagogics a few words are necessary. Anything that so great a master has written must be full of fruitful suggestions to minds able to appreciate them, but it is very unusual for such writings to contain any but remote and obscure pedagogical principles. The present writer does not find the *Discourses* to be an exception to the rule. Sir Joshua's idea of teaching is to tell all that his genius and labours have revealed to him; and telling is not teaching, in the pedagogical sense.

To art masters, teachers of adult students, and adult students themselves, much good will, doubtless, come from reading this book of selections, but the young teacher, and those engaged in teaching children can use their time to better advantage than in studying the *Discourses* for pedagogical guidance. Sir Joshua carefully points out that he is addressing art students who have already gained a "faculty of drawing any object that presents itself, a tolerable readiness in the management of colours, and an acquaintance with the most simple and obvious rules of composition." Teachers can judge for themselves how far they are qualified to be in such an audience.

The editor says, on p. viii., that he "is a child in matters of art—nay, worse than a child"; while on p. x. he says, as though speaking as one having authority:—"it may be questioned whether the prevailing conception of the artistic ideal corresponds to any serious extent with the lofty and manly claims which are exhibited in the *Discourses*." It is difficult to reconcile these statements.

The nine essays by Professor Dewey, under the title of *The School and the Child*, deal with the following topics: the child and the curriculum; the kindergarten; general principles of work, educationally considered; historical development of inventions and occupations; children of eight years of age [school work for]; psychology of occupations; reflective attention; the aim of history in elementary education; the psychology of the elementary curriculum. They are more than worth the serious study of every teacher—however much the reader may differ from the views advanced—and the editor has done a real service to teachers in making them accessible in this form.

H. H.

Manual of Object Lessons. H. P. and W. L. Rooper. Pp. 352. Swan Sonnenschein. 1*s.* 6*d.*

This is a book which professes to teach teachers how to teach children to talk, but which is likely to do the very opposite. It is drawn up on the catechetical plan, though the authors say it should not be so used. It is difficult to understand such an attitude, for either those who use the book must already be wiser than the method, or they will be too ignorant to be able to improve upon it.

The very artificial and quite spurious "answer-in-a-sentence" idea is worked to death. The proper answer to such a question as "What are these two legs called, since they are behind?" is "hind-legs"; not "Those two legs, since they are behind, are called hind-legs" (pp. 216–217). The so-called answer is not the child's sentence at all, but a mere trick repetition of words already supplied by the teacher, in

the question, with a slight addition. Further, the question is a bad one, since if the children already knew the answer, it is wastefully superfluous; while if they did not know the answer, it is useless to ask them. It is the teacher's business to know how to ask questions which demand sentence answers, *e.g.* "What can you tell me about this?"

Much of the questioning is bad in conception and form, *e.g. T.* "Then the chair has a ——?" *C.* "The chair has a seat." A score of different answers might easily have been given to such a vague question; and only by drilling in school tricks can such a method get the answers desired. Still worse are questions as, "With what are not all animals covered?" (p. 320); "What will none of you be?" and the answer "We will none of us be greedy pigs" (p. 352); "How must you take off your hat when you greet somebody?" and the answer, "We should take our hats quite off" (p. 128). Will the authors tell us how to take off a hat without taking it "quite off" and if this mode of greeting is appropriate for a boy of five greeting a boy of two?

The reviewer regrets that he cannot find matter for praise in the book.

H. H.

L'Educateur Moderne. March to July, 1910. H. Paulin & Cie. Paris.

One of the most useful articles is that by M. Hémon in the March issue, on some inquiries into the psychological conditions of spelling. He discovered that a Japanese student, who had lived in France six years, pronounced badly because he had never clearly distinguished the sounds of the words, and spelt badly because his articulation was at fault. Some experiments made on a class of girls confirmed his view that training in distinguishing spoken sounds and in careful articulation would overcome many spelling errors more effectively than only spelling, or reading, or writing words. The point is not new, but is often enough neglected to bear repetition, and this careful article will well repay perusal.

In the April issue Mr. Roger Cousinet writes, as always, very sensibly upon affection in children. He urges that the first thing the child has to do in the world is to learn to know it, hence there is little place for the life of feeling in young children —its development lies with the adult. The variableness of their memory accentuates this; just because their affections are not easily fixed, they easily lapse, unless constantly renewed. All the power of the child's mind during its first years goes in understanding and organizing the world.

In the May number Mlle. Berillon puts the promotion of happiness as the end of education, and investigates all parts of the field, physical, intellectual, and moral, to support her thesis and show the way to success.

The issue for July is better than usual. Dr. Victor Pauchet gives a *résumé* of the Conference of the French Vegetarian Society, which he entitles "*The Art of Remaining Young.*" The subject seems to have some connection with child-study; the treatment is thorough, and the suggestions may be useful. M. Cousinet provides an interesting article on "*The Authority of the Master in his Classes.*" One wonders whether there are classes in England where quite the same things happen. The "chahut," to quote the school-boy's slang term, must make unbearable the lives of the masters subjected to it. M. Cousinet examines the question why some should be so subject to it and others not, with many examples. He concludes that what the teacher most needs to keep his class in hand is insight, the quiet power of detecting tricks and jokes, and getting to the bottom of the pupil's hearts. He needs to keep his mind alert to all the life of the class, to see in his pupils something more than scholars. Yet there are some who may do all that, and yet not conspicuously succeed in maintaining discipline. Perhaps the secret may not be told. Some selections from a forthcoming work by Professor F. Queyrat, on the Psychology of Curiosity, are interesting.

T. G. T.

Betterment: the Official Organ of the Betterment League.—This is a new monthly penny magazine, edited by Alfred E. Hayes, whose object it is "to provide a common rallying ground, for all who love their country, and who believe that Betterment must begin with the Child." The editor desires to bring about co-ordination and co-operation amongst all societies "aiming at Civic Health and Beauty through Consideration for the Child," and he holds that he can find a centre for corporate enthusiasm amongst those interested in the upbringing of citizens by concentrating their efforts on "The Child and the City Beautiful." Mrs. Higgs' well-known work in relation to the "Beautiful Oldham" crusade is taken as the model.

The magazine is ably edited and full of interesting and informing matter. It deserves a great success, for its aim is wholly beneficent, even to the devoting of any profits—after paying expenses and five per cent. on capital—to the furthering of the ideas it advocates. H. H.

The Pedagogical Seminary, June, 1910, opens with an interesting article on "The Moving Picture in Relation to Education, Health, Delinquency, and Crime," by Dr. J. E. Wallace Wallin. I have made use of this in my article on "Children and Cinematographs," in this issue of *Child-Study*. Teachers of voice training will find help and guidance in "The Mechanism of the Voice and its Hygiene," by Harry P. Weld. There is a short bibliography attached. Dr. Stanley Hall writes a "General Outline of the New Child-Study Work at Clark University," and this is expanded by separate reports on the various departments, viz. "The Library," by Dr. Louis N. Wilson; "Correspondence," by Dr. Theodate L. Smith; "School Hygiene," by Dr. Wm. H. Burnham; "Work with the Backward and Sub-Normal," by Harry W. Chase; "Experimental Didactus," by Dr. Amy E. Tanner; "Child Linguistics," by Dr. John A. Magni; and "Special Child Surveys," by Clark University students. All interested in the future of child-study work should carefully read these articles, to learn how vast and vital are the topics with which we are concerned. An outspoken article on "The Teaching of the Facts of Sex in the Public School," by Clara Schmitt, raises grave issues which demand serious attention. It has a selected bibliography appended. The concluding article is on "The Contents of Children's Minds," and is by Dr. Walter Libby and five co-workers. This gives the results of oral questioning, and of written work of "Children who had not entered school, others who on account of their social conditions had lacked the advantages of home training, others again who had entered the high school, and finally a group of white and coloured children." H. H.

Publications Received.—*Eugenics Review; Journal of Education; Educational Times; Child Life;* "*Manual Training*"; "*Practical Spelling*" (Longmans, 6*d.*); *Parent's Review;* "*Evening Play Centres*" and "*Report of Certain Vacation Schools and Playgrounds*" (from Mrs. Humphrey Ward); "*School Hygiene*"; "*Medical Education in the United States and Canada*" (The Carnegie Foundation for the Advancement of Teaching, New York City); "*Open Air Recovery School*" (Report to City of Sheffield Education Committee by Dr. R. P. Williams); "*The Health Visitor*" (National League for Physical Education and Improvement, 1*d.*); "*Dangers to Health*" (Herbert H. Tidswell); "*Scales without Weights*," a paper on the mental attitude of boys toward religion (Alex. Devine); "*Report on the Employment of Children in the United Kingdom*" (British Association for Labour Legislation, 3*d.*); "*The Dormouse, and other Nature Songs*" (The Vincent Music Co., 1*s. net*).

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The Eugenics Review

(*Poor Law Number*).

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